

Integration of Personal Newspapers and Interactive Browsing

Ensemble Information Systems - A WAIS Inc. development partner

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This paper describes how WAIS Inc and Ensemble Information Systems are cooperating to bring together Alerting, Researching, and Browsing to a wide audience on computer networks.

The World Wide Web offers a rich interactive infrastructure for those directly connected to the Internet. This has been popular with the "surfers" for finding fun things and sometimes useful things on the Internet. *This is great for spontaneous queries and exploring does not emphasize passive browsing of what editors think is important.*

"Digital Newspapers" offer an edited view of important information by delivering packaged content through electronic mail. This helps get to users who are not directly connected to the Internet and more importantly, to those who are too busy to "log in" to a remote system to see what is new. The news is delivered every day or every week to your personal mailbox. *This is great for browsing, but is not a personalized service.*

The "Personal Digital Newspaper" goes one step further and allows readers to create an agent to layout a custom newspaper based on only the things they want to see. This can be a digest of many different sources of information and can be presented in the way the user wants to see it. *This is great for personal filtering and delivery.*

Tightly integrated, these systems can deliver priority information when needed, while allowing the user the ability to dive into background by interactively requesting more information. Depth and breadth can now be combined.

What this would offer a publisher is the ability to leverage editorial abilities, have provable distribution numbers, and turn casually interested readers into long term subscribers.

This would offer the reader an ability to browse, research, and customize their information. The reader will only see information they want to see in the format they want.

From World Wide Web to Digital Newspaper

If users discover an interesting WAIS service in the WWW and want to stay up-to-date on the service, they hit the "Subscribe to Digital Newspaper" button that will allow the user to register an email address, credit card, and demographics.

From there, the Digital Newspaper is delivered daily, weekly, or monthly to their email box.

This will increase readership in the same way as home delivery increases readership of magazines: convenience.

From World Wide Web to your own Personal Digital Newspaper

While searching the WAIS through WWW, a person may want to find answers to immediate questions, but might also want to be alerted to new things happening on that subject. This is where the "Add to Personal Digital Newspaper" button comes in. Then the saved search can be added to your own newspaper in the column that is desirable for you.

Moving smoothly from an interactive query to a periodic alert can help users stay informed on subjects they care about with very little effort.

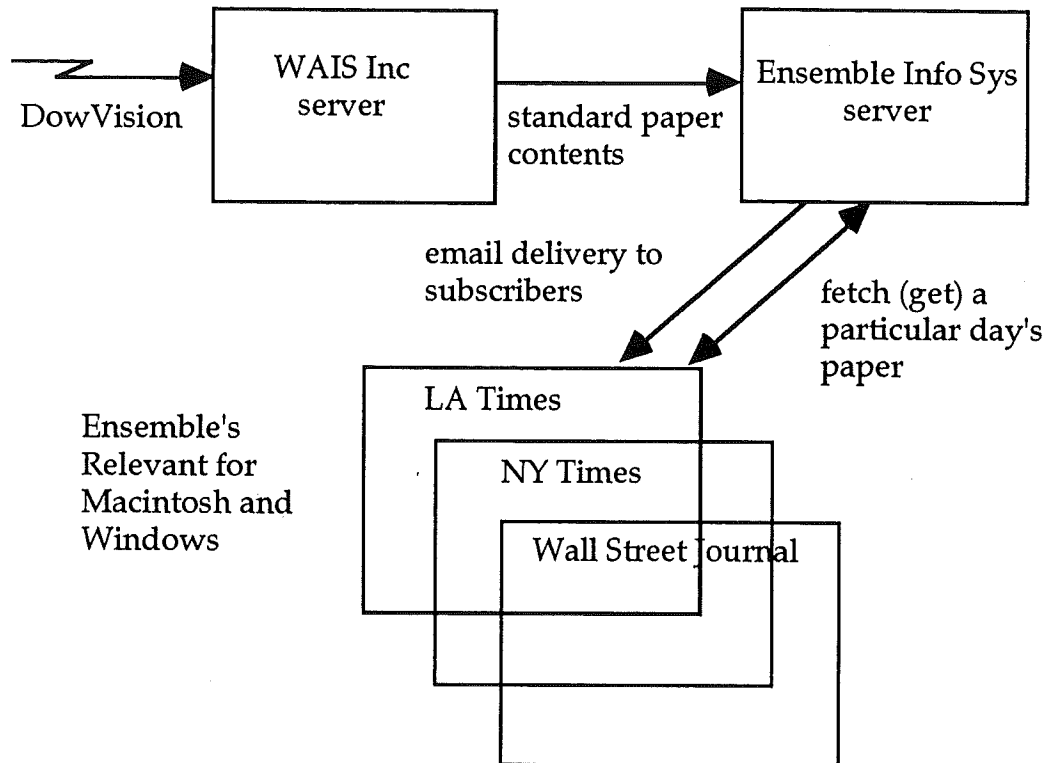
From Digital Newspapers to World Wide Web

Upon reading a Digital Newspaper or Personal Digital Newspaper, if the reader wants more information on a subject, hitting a button will request it of WAIS through the World Wide Web. When the reader wants more on a company or country, then the WWW page for that company is requested. This page would be created at the time of request to search many different sources for the user.

Say the user likes an article and wants to see more like it, then a reference to the article is passed back to the server and articles from servers from around the globe can be found that pertain to that article.

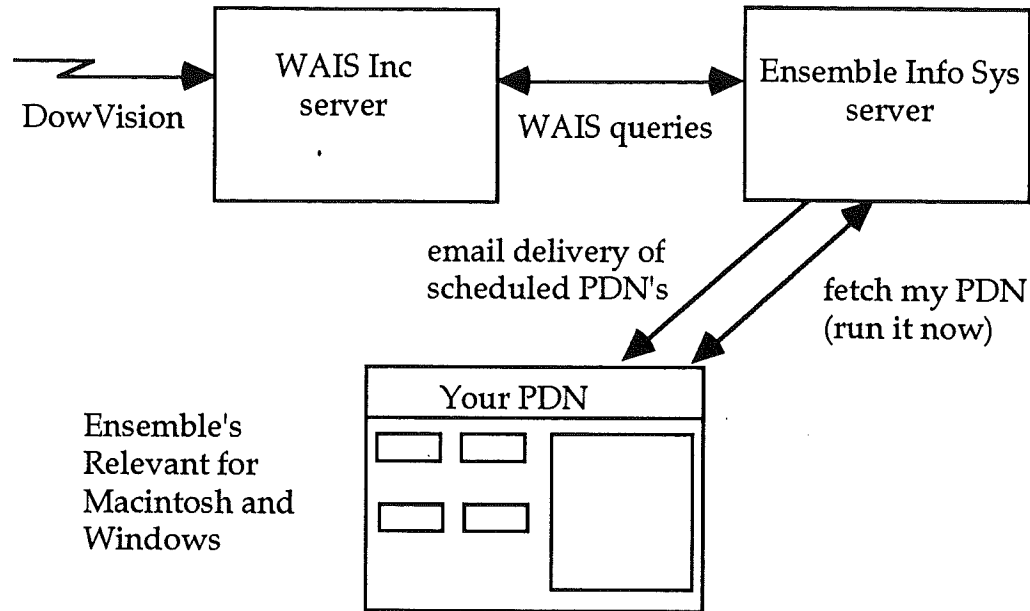
The power of diving into a subject area after reading it in an alert would offer advantages over paper and current electronic media.

Technology behind Standard Newspapers



The WAIS Inc server receives and indexes the DowVision feed from DowJones. Each night, the Ensemble's server queries the WAIS Inc server and obtains the entire contents of a given publication and processes it. A document is created that contains the entire paper with the indexing information needed for navigation. The document is distributed as an email attachment to registered Relevant users who have subscribed to daily delivery of that paper. The document is also made available for registered Relevant users to fetch (get) a specific day of the paper.

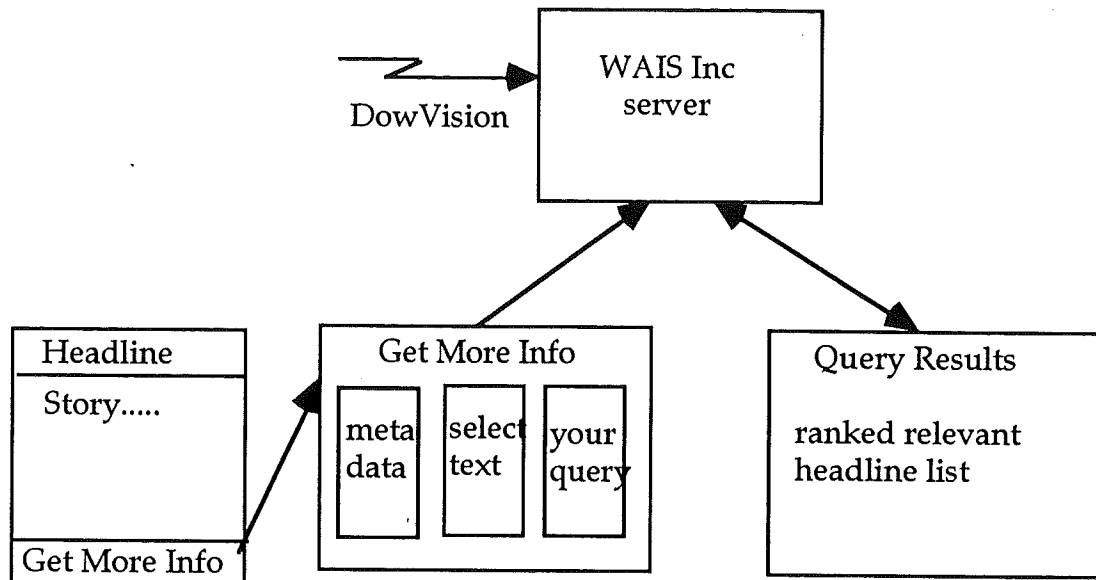
Technology behind Personal Digital Newspapers



Relevant users can define their own Personal Digital Newspaper (PDN). Each user can schedule a PDN to be run at a specified time and delivered as an email attachment. Users can also fetch a PDN, requesting that it be run immediately.

Currently PDN's are created using the Dow Jones meta-data codes. In the future, full text WAIS queries will be combined with the Dow Jones meta-data codes.

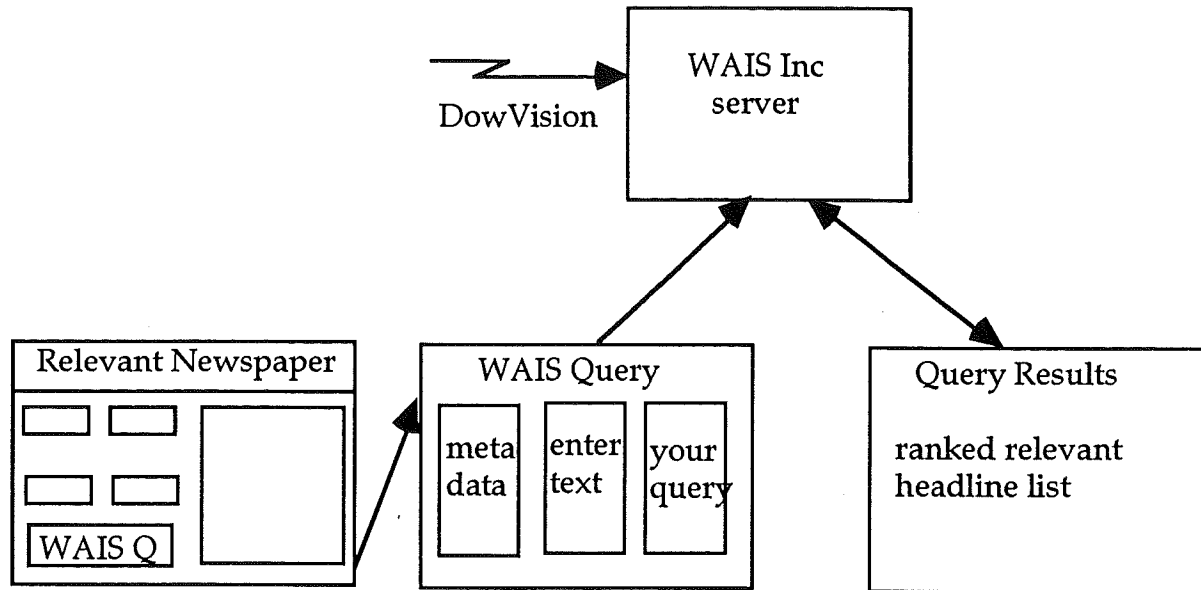
Technology behind Get More Info



Ensemble's Relevant for
Macintosh and Windows

When reading a story, users will be able to **Get More Info** about the story that they are reading. The **Get More Info** query dialog will display the Dow Jones meta-data categories that are applicable to the story, along with any text that the user selects from the story. The user can then select the appropriate meta-data categories, and edit or enter query text, resulting in a WAIS query that combines text and meta-data. This query is then sent directly to the WAIS server using the Z39.50 protocol. The headlines of the resulting stories are displayed in ranked relevance order. When the user selects a story to read, the request for the full text of that story is sent directly to the WAIS server.

Technology behind a WAIS Query



Ensemble's Relevant for
Macintosh and Windows

When reading any Relevant Newspaper, either standard publications such as the Wall Street Journal or New York Times, or Personal Digital Newspapers, users will be able to do direct WAIS Queries. The WAIS Query dialog will display the Dow Jones meta-data categories and allow the user to enter text resulting in a WAIS query that combines text and meta-data. This query is then sent directly to the WAIS server using the Z39.50 protocol. The headlines of the resulting stories are displayed in ranked relevance order. When the user selects a story to read, the request for the full text of that story is sent directly to the WAIS server.